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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/678,899

10/02/2003

Joseph Consolini

6601P033

2351

8791

7590

03/26/2007

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EXAMINER

LAMB, BRENDA A

ART UNIT

PAPER NUMBER

1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/678,899

Applicant(s)

CONSOLINI ET AL.

Examiner

Brenda A. Lamb

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/13/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8 and 28-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5,8 and 28-34 is/are allowed.
- 6) ☒ Claim(s) 35-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The finality of the final office action mailed 12/12/2006 and rejection of the claims presented in the amendment filed 3/13/2007 is set forth below.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al 2002/0112662 in view of Applicant's Admitted Prior Art Teaching (see Figure 1, weeping seal 150 and paragraph 0004-0006 of the specification).

Yamauchi et al disclose a system comprising at least one nozzle as disclosed at paragraph 0032 to dispense a first liquid (a photoresist), a bowl (11) having an interior region and an interior surface; and a wafer platform and spindle (see paragraph 0032) disposed within the interior region of the bowl, wherein the wafer spindle coupled to the

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wafer platform to spin the wafer platform to propel an excess amount of the first liquid deposited upon a wafer placed upon the wafer platform to the interior surface of the bowl; a first liquid (photoresist) recovery container or cup which includes a separate waste fluid tank as disclosed at paragraph 0036; a first perimeter drain (area 15, 19) formed within the bowl such that the excess amount of the first liquid (a photoresist) is propelled from the wafer proceeds through the perimeter drain to the recovery container, a vertically disposed waste drain (i.e., area 16), and a second perimeter drain (defined by inner walls of second cup 12) is formed about the bowl to recover a second fluid (a diluted photoresist). Yamauchi et al second liquid recovery container or cup (20) separately collects a different type of liquid (diluted photoresist) from that collected by the first liquid recovery container or cup as disclosed at paragraph 0036. Applicant's intended use that the one or more additional perimeter drains enable the system to change photoresist types while in production thus reducing down time for photoresist changing operation has been given no patentable weight to the claimed apparatus since the claimed dispensing element, a nozzle, delivers or supplies a single photoresist to the system at a time. Yamauchi et al fails to teach a weeping seal to permit a wash solvent. However, it would have been obvious to modify the Yamauchi et al apparatus by providing a weeping seal to permit a wash solvent to wash the excess amount of photoresist such as taught by Applicant's Admitted Prior Art Teaching (see Figure 1) for the taught advantage of cleaning at least a portion of the inner surface of bowl. With respect to claim 36, Yamauchi et al teaches at paragraph 0033 the chuck and evidently the shaft is adjustable.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al 2002/0112662 in view of Applicant's Admitted Prior Art Teaching (see Figure 1, weeping seal 150 and paragraph 0004-0006 of the specification) and Yamasaka 5,997,653.

Yamauchi et al and Applicant's Admitted Prior Art Teaching (see Figure 1) are applied for the reasons noted above but is silent concerning the bowl being adjustable relative to the wafer platform. However, it was known in the art, at the time the invention was made, to provide an adjustable/movable bowl relative to a wafer platform to facilitate cleaning/rinsing of the wafer as evidenced by Yamasaka (col. 5, lines 64 to col. 6, lines 1-10 and col. 7, lines 19-29). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate an adjustable bowl such as taught by Yamasaka in the Yamauchi et al system in order to facilitate cleaning/rinsing of a treated wafer.

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.


Claims 1-5,8 and 28-34 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday. The examiner can also be reached on alternate Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached on (571)272-1231. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brenda A Lamb
Examiner
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